



# Governor's Health Sciences Academy

Monticello High School

# Rationale

- ***Increasing Opportunities for Health and Medical Careers***
- Fastest growing occupations that will generate 3.2 million new wage and salary jobs between 2008 and 2018.
- Labor projections in the Charlottesville area
  - Healthcare Practitioner & Technical Occupations (8,104 job openings)
  - Health Support Occupations between 2008 and 2018 (4,478 job openings)

# Participating High Schools

## Albemarle County Public High Schools:

- Albemarle HS
  - Monticello HS
  - Western HS
- Albemarle HS





# Goals

- Students will be exposed to and explore health-related career opportunities.
- Students will build a strong foundation and understanding of Anatomy and Physiology.
- Students engage in a collaborative learning environment with students who share similar career interests.
- Division Goals:
  - Prepare students for success in a Global Community
  - Establish Centers of Excellence

# Health Science Career Pathways

- Pathways to be implemented in 2013-2014:
  - Biotechnology Research and Development
  - Therapeutic Services
- Pathways to be implemented in the next three years:
  - Health Informatics (2014-15)
  - Diagnostic Services (2015-17)
  - Support Services (2016-17)



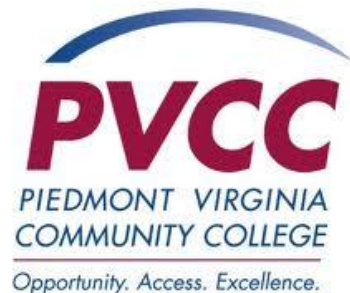


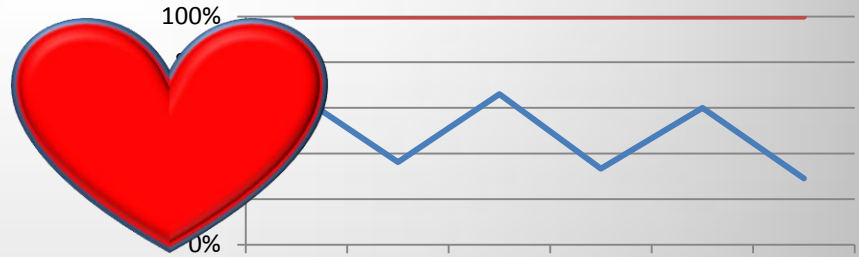
# Work Based Learning & Other Experiences

- Internships
- Job Shadowing
- Classroom Speakers
- Business and Industry Tours
- Clinical Experience



# Partnerships





# Governor's Health Sciences Academy Proposal

Chesterfield County Public Schools

April 25, 2013





# Rationale

## Health Care Industry

**National:** 3.2 million new wage and salary positions by 2018  
(*Bureau of Labor Statistics Career Guide to Industries*)

**State:** Growth trend of 3.1% annually over the next ten years compared with a 1.7% rate for all other industries (*Chmura Economics & Analytics 2012 Report for Secretary of Education Fornash*)

**Regional:** Chmura Economics & Analytics forecasts that the Richmond area will see health care jobs grow faster than the regional average for all other job categories.

# Why a CCPS Governor's Health Sciences Academy?

- Meet demands/desire for increased rigor with an instructional and career focus (relevance)
- Opportunity to push students toward Dual Enrollment and Advanced Placement
- Coordinate and optimize resources and facilities to better serve more students and families
- Support the push for providing better qualified candidates for health-science related work and higher education settings

# Plan: One Governor's Academy



Cosby High School

Three Sites



Monacan High School



Chesterfield Technical Center



# Goals

- Advanced coursework in health-science area
- Overview of health-science career options
- Enhanced academic skills (such as oral and written coursework related to health-science topics in CORE English courses)
- Field experiences and community service work
- Knowledge to make a more informed decision and future education and career plans
- More students prepared to successfully major and work in health-science related fields after graduation

# Chesterfield Health-Sciences Partnerships





# Outcomes



Graduate with:

- Enhanced 21<sup>st</sup> Century skills in areas like teamwork, communication, problem solving and use of career-related computer/technology
- Advanced Diploma with a career focus
- Transferable credits to higher education
- High School experience that student sees as relevant to his/her future plans and has service to others embedded as a central life theme
- Advantage over other students entering health science careers and educational venues



Park View High School (Mecklenburg)	Cumberland High School		
Nottoway High School	Randolph Henry High School (Charlotte)	Amelia High School	
Brunswick High School	Greenville High School		
<b>Superintendent's Region 8</b>			
Buckingham High School	Halifax High School	Central High School (Lunenburg)	Bluestone High School (Mecklenburg)
Prince Edward High School			



## Governor's Health Sciences Academy Proposal

*An academic program that combines coursework and research experience with a challenging and focused school and college environment to prepare students for 21<sup>st</sup> Century careers in the health sciences.*





# Rationale

- Employment in the medical office assisting field is expected to grow 21 percent in the next ten years (Bureau of Labor Statistics) due to the aging population.
- The Virginia Employment Commission predicts that an additional 35.4 percent of healthcare and social assistance workers will be needed by 2020.
- In Region 8, 93,531 workers in healthcare are now 55 and older and will be retiring soon.
- Out of the 50 largest employers in Region 8, nine are either hospitals or nursing homes.
- The increase use of electronic records will increase the need for technicians to organize and manage information.



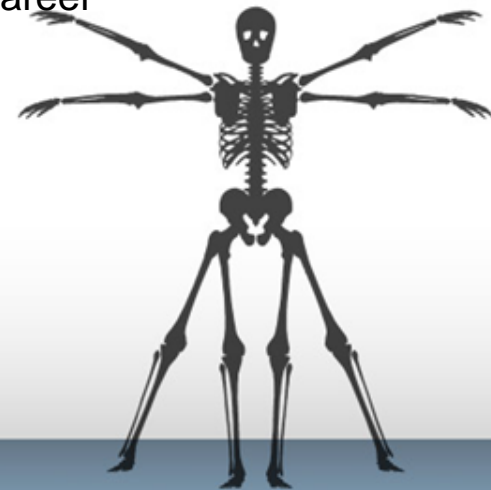
# Program Overview

- The Academy is designed to give students in grades 9-12 the opportunity to enroll in health sciences career pathways while incorporating work-based learning and other experiences such as internships, project-based activities, job shadowing, and Virginia's Workplace Readiness Skills for the Commonwealth
- The career pathways will prepare students for programs in Therapeutic Services, Diagnostic Services, Health Informatics, Support Services, and Biotechnology Research and Development leading to bachelor degrees, associate degrees, and industry certifications.



# Goals/Performance Measures

- Increase the number of students who have a GPA of 3.0 over the next four years, using 2012-2013 academic data for the baseline.
- Increase the number of Academy students meeting the requirements of the Advanced Studies Diploma, taking dual enrollment courses, and earning industry certifications by 10% over the next four years.
- Increase the proportion of students completing a college and career curriculum in high school.
- Increase the number of postsecondary credits earned through Advanced Placement courses by 5% over the next four years.
- Ensure that 100% of students participate in the work-based experiences, through strong partnerships with businesses and organizations.
- 60% of Academy graduates will obtain employment within the identified career pathways and related occupations following postsecondary education.





# Outcome Measurements

- To successfully complete the program, students must:
  - Maintain a 3.0 GPA
  - Take the required dual enrollment courses at the home school
  - Complete a health sciences work-based internship or job shadowing (minimum of 15 hours)
  - Complete courses with a specific pathway in health sciences
  - Earn an industry certification or at least 15 transferrable college credits





# Program Partners



- Southside Virginia Community College (SVCC)



- Local hospitals, nursing homes, and assisted living homes

- South Central Workforce Investment Board

- Piedmont Health District



- Southside Governor's School



- Superintendent's Region 8 school divisions:
  - Amelia, Brunswick, Buckingham, Charlotte, Cumberland, Greenville, Halifax, Lunenburg, Mecklenburg, Nottoway, Prince Edward

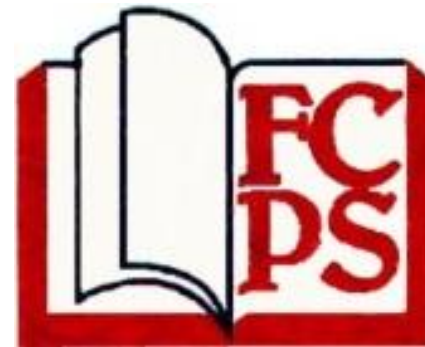


# Falls Church Academy

Health and Human Sciences - Where Skilled Scholars Thrive



## Governor's Health Sciences Academy





# **The Falls Church Governor's Health Sciences Academy**

## **Objectives**

- To promote student interest and achievement in Health Science careers
- Increase student enrollment in Academy classes
- Expand professional speakers, job shadow and internship opportunities
- Increase health science industry connections
- Produce individuals better trained to support the shortfall of health care employment needs

# RATIONALE

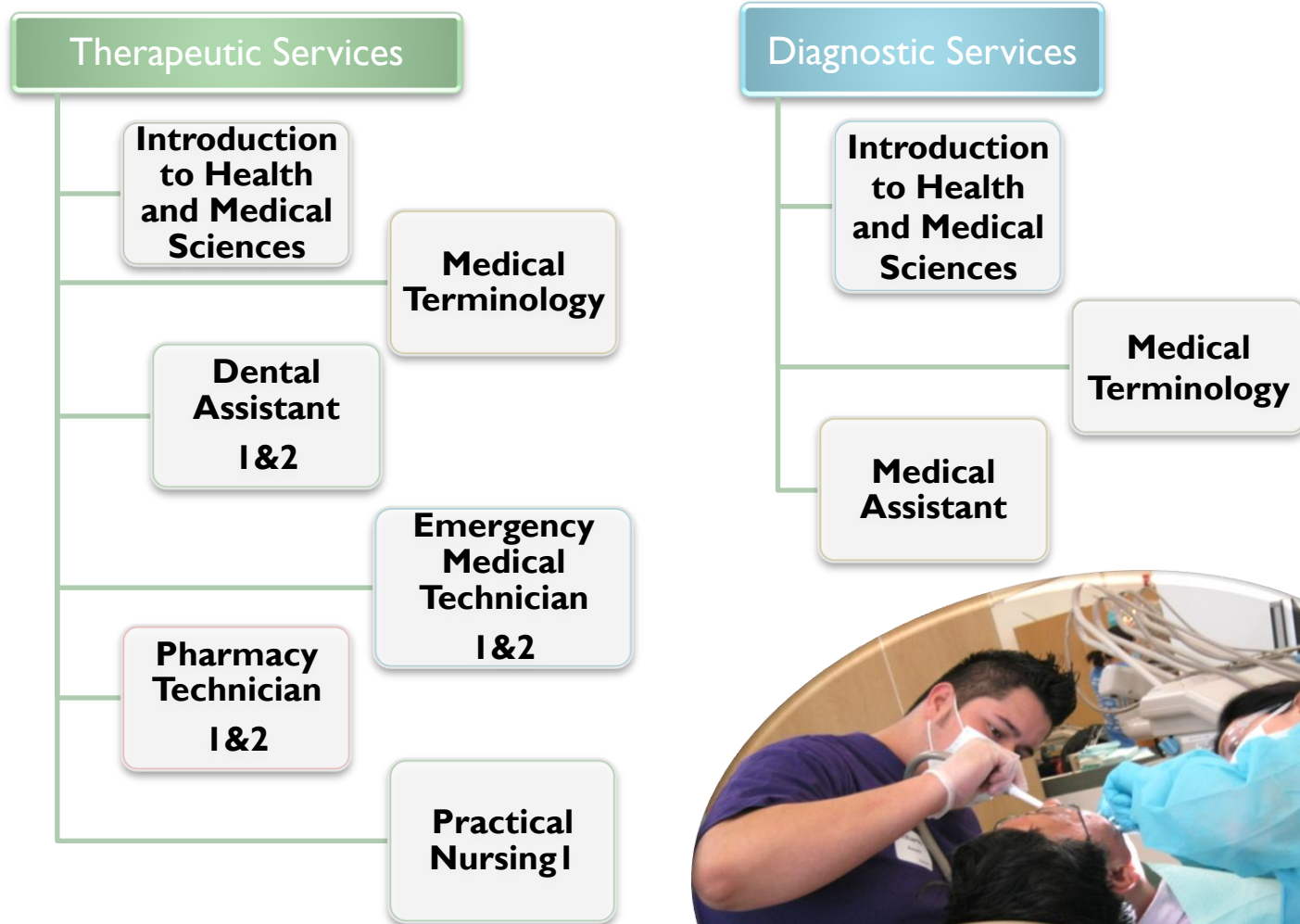
- Healthcare sector employment is projected to increase to nearly 18.3 million jobs in 2020. Over 1 million of these jobs will be in the Northern Virginia area. (BLS Occupational Projections 2010-2020; Virginia Employment Commission, 2013)
- The total number of health care workers will increase by more than 4.7 million between 2010 and 2020. In addition, another 2.7 million health care workers will be needed to replace individuals expected to leave their jobs due to retirement and attrition. (BLS Occupational Projections 2010-2020)
- Inova Health Systems is the 4<sup>th</sup> largest employer in Northern Virginia and the 13<sup>th</sup> largest employer in the state.(Virginia Employment Commission, 2013)
- Ten of the top 30 largest employers in Virginia are related to health care services. (Virginia Employment Commission, 2013)



# Falls Church Governor's Health Sciences Academy

## Health Science Cluster

### Fully Developed Pathways and Courses



# Falls Church Governor's Health Sciences Academy

## Health Science Cluster

### Pathways and Course Timeline

Health  
Informatics  
2013-14

- **Computer Solutions (6609)**
- **Digital Input Technologies (6160)**
- **Foundational Health and Medical Sciences courses**
- **Pharmacy Technician 1 & 2 (8305, 8306)**

Support Services  
2014-15

- **Computer Solutions (6609)**
- **Digital Input Technologies (6160)**
- **Foundational Health and Medical Sciences courses**
- **Advanced Computer Systems (6613)**
- **Entrepreneurship (9093) or Leadership Development (9808)**

Biotechnology  
Research and  
Development  
2015-16

- **Computer Solutions (6609)**
- **Digital Input Technologies (6160)**
- **Foundational Health and Medical Sciences courses**
- **Biomedical Technician (8347)**
- **Biotechnology Foundations (9050)**

Courses completed in middle school

Includes: Intro to Health and Medical Sciences (8302) and Medical Terminology (8383)



# PERFORMANCE MEASURES

- Student grade reports
- Academy partnership records
- Mentor/Partner assessment report
- Student enrollment report
- Number of industry credentials earned (309 in 2011-12)
- Internship and job shadowing experiences (113 in 2011-12)
- CTE Follow-Up Survey Data
- Academy student/teacher/partner surveys
- Planning and Advisory Committee review

## Falls Church Governor's Health Sciences Academy

- The only location within Fairfax County Public Schools to offer the Emergency Medical Technician Level 1 & 2 course.
- Continually provides external support for the Practical Nursing Level 1 program through recruitment, career experience opportunities, and administrative needs.
- In house special needs pre-school provides students with opportunities for authentic learning.

# business & industry partners

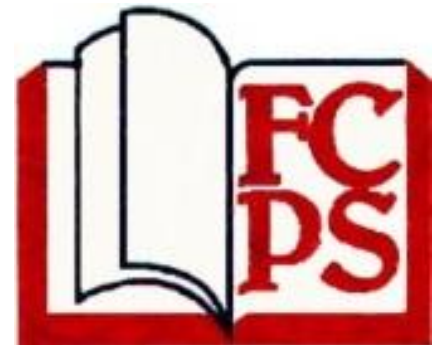


# WPA



*Building Blocks for Success.*

## GOVERNOR'S HEALTH SCIENCES ACADEMY PROPOSAL

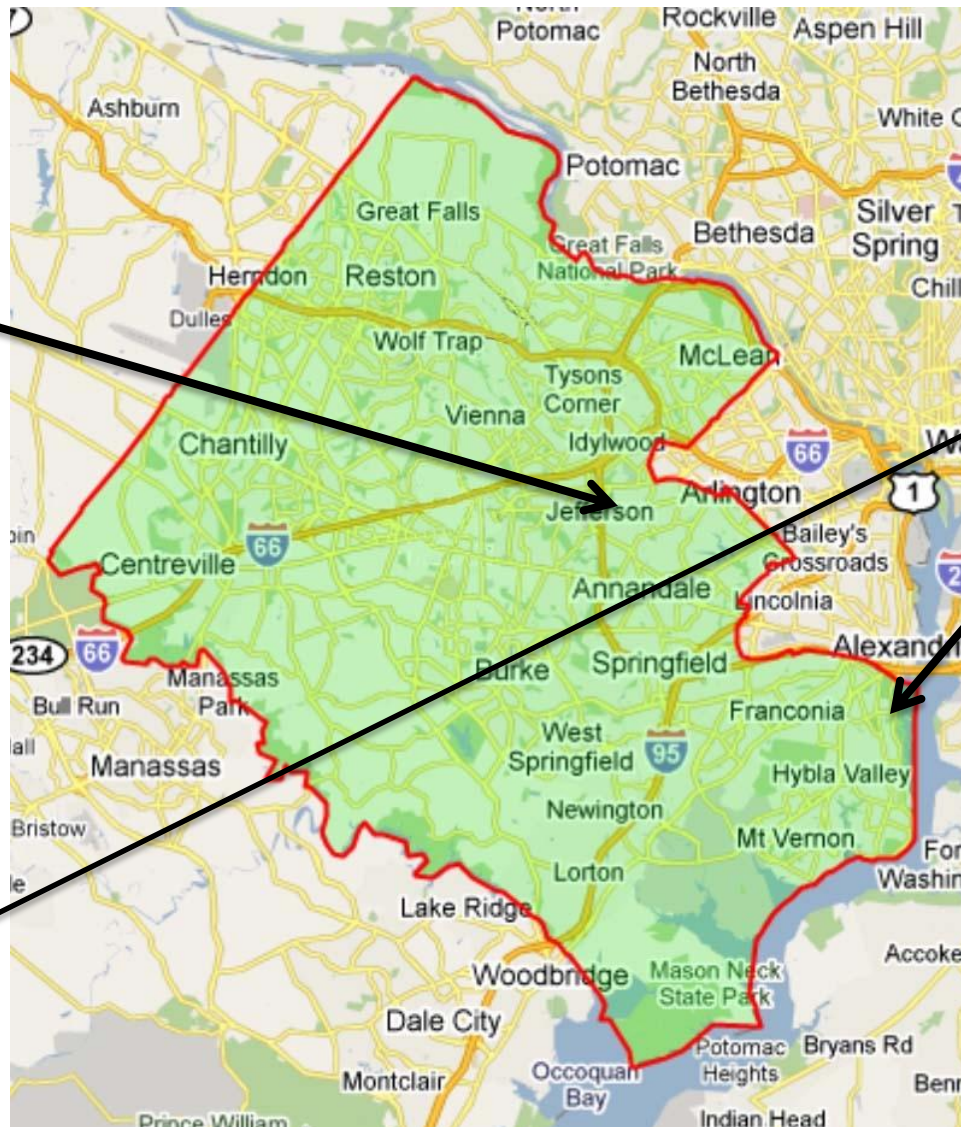




# WHY TWO?

Falls Church

West Potomac



# RATIONALE

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**By 2020 the health care sector employment is expected to increase by 18.3 million jobs (BLS Occupational Projections 2010-2020)**

**They are projecting 2.7 million vacancies in the health care field due to retirements and attrition from the profession between 2010 – 2020 (BLS Occupational Projections 2010-2020)**

**In Virginia 13.8% of all jobs filled in the next four years are expected to be in the areas of STEM-H. That number increases to 23% in northern Virginia (Chmura, 2012)**

# SCHOOLS WE SERVE

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Annandale High School  
Centreville High School  
Chantilly High School  
Edison High School  
Fairfax High School  
Falls Church High School  
Hayfield Secondary School  
Herndon High School  
Lake Braddock Secondary School  
Langley High School  
Lee High School  
Madison High School  
Marshall High School  
McLean High School  
Mount Vernon High School  
Oakton High School  
Robinson Secondary School  
South County Secondary School

South Lakes High School  
Stuart High School  
Thomas Jefferson High School for  
Science and Technology  
West Potomac High School  
West Springfield High School  
Westfield High School  
Woodson High School  
Bryant Alternative Learning Center  
Mountain View Alternative High  
School  
Landmark Career Academy  
Woodson Adult High School  
Career Centers  
Davis Center  
Pulley Center  
Cedar Lane Center  
Quander Road Center

# WEST POTOMAC GOVERNOR'S HEALTH SCIENCES ACADEMY

## CAREER CLUSTERS, PATHWAYS, AND COURSES

### Health Science Career Cluster

#### Therapeutic Services

- Introduction to Health Sciences
- Medical Terminology
- Medical Assistant
- Physical/Occupational Therapy 1 and 2
- Dental Assistant 1 and 2

#### Diagnostic Services

- Introduction to Health Sciences
- Medical Terminology
- Medical Assistant

#### Health Informatics

- Introduction to Health Sciences
- Medical Terminology
- Pharmacy Technician 1 and 2

#### Support Services

- Introduction to Health Sciences
- Medical Terminology

#### Biotechnology Research and Development

- Introduction to Health Sciences
- Medical Terminology
- Biotechnology Foundations
- Biomedical Technician

# PERFORMANCE MEASURES

- **Student grade reports**
- **Number of industry certifications earned**
- **Postsecondary credits earned**
- **Internship and job shadowing student placements**
- **Division graduation index reports**
- **Student program enrollment reports**
- **CTE Follow-Up Survey Data**
- **Local Surveys (including 3-4 year follow-up)**

# ACADEMY PARTNERS

## Business & Community Partners:

INOVA Health System  
Capital Caring Hospice & Palliative Care  
Walgreens  
Entertainment Industries Council (EIC)  
Greenspring  
Annandale Chamber of Commerce  
Falls Church Chamber of Commerce  
Dominion Hospital  
U.S. Dept of Homeland Security - United States Secret Service  
County of Fairfax, VA  
Fairfax County Police Department  
Fairfax County Fire and Rescue Department  
Fairfax County Sheriff's Office  
Arlington County Fire Department  
Sterling Fire and Rescue  
Occoquan-Woodbridge-Lorton Fire and Rescue  
Prince William County Fire and Rescue - Paramedics  
International Association of Fire Fighters  
Falls Church Early Childhood Class Based Special Education Center  
Northern Virginia Dental Clinic  
Mission of Mercy - Virginia Dental Association

## Higher Education:

University of Maryland, School of Dentistry,  
Howard University, School of Dentistry,  
VCU School of Pharmacy, Inova Campus  
Northern Virginia Community College,  
Medical Education Campus (Dental, Nursing, Paramedic, PT/OT)  
Columbia University, School of Dentistry,  
School of Physical Therapy  
American Association of Colleges of Pharmacy  
George Mason University (Nursing)

## Industry Professionals:

Paul Spring Retirement Community  
Sunrise Senior Living  
Wise Hospice Options  
Dr. Jose Colon, Forensic Dentist  
Dr. John Tsaknis, Dental Bug  
Dr. Marvin Pizer, Oral Maxillofacial-Oncology  
Dr. Adrian Patterson, Oral Maxillofacial Surgery  
Dr. Williams & Dr. Leaf, Pediatric Dentist  
Harry McLaughlin, Patterson Dental  
Great Lakes Orthodontics  
Brett Brocki, Kodak Digital X-Ray/Front Desk Software  
Dr. Ellis, Orthodontist

## Industry Professionals

### *continued :*

Dr. Steele, South County Public Health Dentist  
Dr. David Hughes, Orthodontist  
Prestopino Brothers, Dental Lab, Springfield  
Northern Virginia Mission of Mercy  
Operation Smile  
Back in Motion Physical Therapy  
Bodies in Motion Physical Therapy  
Select Physical Therapy  
Physical Therapy Sports Medicine Institute  
The Jackson Clinics  
Orthopedic Physical Therapy  
Manor Care of Arlington, Rehabilitation Department  
Anderson PT Clinics

## Fairfax County Public School Partners:

Head Start Program  
Pre-School Centers  
Pulley Center  
Elementary Schools  
Middle Schools  
High Schools